

LEITNER-NEWS

LEITWIND - On the path to success



A year ago LEITNER announced the development of an enhanced wind turbine. Since then, a pilot plant with the new model is ready for installation.

In addition to various improvements derived from operations with the first prototype, LEITWIND engineers have made two major changes. First, the new turbine incorporates winding segments that can be replaced individually without dismantling the generator. This is a big advantage in regards to maintenance. Second, the new model is designed for higher generator torque. In addition, LEITNER's engineers have developed a convincing new solution for the control system.

The new LEITWIND wind turbines, with their highly aesthetic looks, will be available as the LTW 70 and LTW 77. The numbers refer to rotor diameter, which is a key parameter in terms of energy production from wind power plants.



Editorial



Dear Readers,

It is with the greatest interest that I follow the progress made on the two biggest contracts we are currently handling, namely the MiniMetro® in Perugia and the detachable bicable gondola in Hong Kong. The visits I have made in the last few months to various construction sites, including the sites of these two major urban passenger transport projects, have given me an insight into the varied and highly responsible work done by our crews in the field.

I was particularly impressed by my tour of the huge site in Hong Kong, where we are in the process of building a detachable bicable gondola. The 5.8 km line does not run entirely over solid ground; it also crosses a 1,400 m wide estuary of the sea, and that was one of the biggest challenges in the construction of the ropeway. Far from their normal working environment, our first-class team of fitters has done an impressive job with some highly innovative solutions. In particular, they showed great imagination when it came to pulling the track rope across the estuary, making use of a completely new tool in ropeway engineering, namely ships!

Assembly work on the site is co-ordinated by our engineers and performed in collaboration with local personnel. All this makes a serious call on the energies of our employees, not only with regard to their engineering skills but also in terms of linguistic and cultural differences, often exacerbated by difficult climatic conditions. And yet they continue to search for the best possible solutions and produce excellent results, which are reflected in part in the extremely positive attitude of the local residents there. Similarly, the people in Perugia are following the progress made on their MiniMetro® with mounting excitement.

Everywhere I went, whether in Italy or far from Europe, I was thrilled by the conscientiousness and untiring commitment of our employees working in the field.

Yours,
Michael Seeber

Nordkettenbahn - The new major project in Innsbruck

LEITNER, STRABAG and Innsbrucker Nordkettenbahnen GmbH, which is owned by the Innsbruck municipal authority, have established a private-public partnership for the redesign, reconstruction and subsequent operation of the ropeways serving the Nordkette mountains above the city with a new bottom terminal occupying a central location near the Convention Center.

For Innsbrucker Nordkettenbahnen GmbH, the decision to award the contract was doubtless influenced not only by the innovative approach to financing the project but also by the sheer elegance of the architectural solution developed by Zarah Hadid. She had already made her mark with the new Berg Isel jump hill in Innsbruck. On top the choice of line that could be expected to receive the necessary approvals, which - after so many disappointments with earlier proposals - was clearly no easy task. The subcommittee of the Innsbruck City Council was additionally convinced by the partnership formed between a leading contractor like STRABAG and LEITNER as an internationally successful ropeway manufacturer.

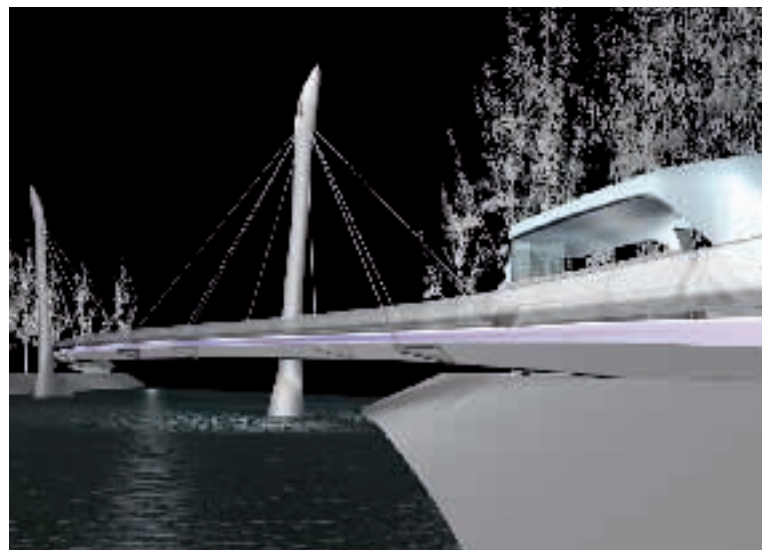
The Nordkette ropeway will continue to operate in three stages. For the first stage from Innsbruck's Old Town to Hungerburg via Löwenhaus and the Alpine Zoo, LEITNER will construct a funicular that travels partly underground. The line starts more

or less on the flat at the Convention Center and finishes with a very steep section at Hungerburg. The LEITNER response to such an unusual profile was to develop a hydraulic tilt control system for the two funicular cars with their five compartments each. Thanks to automatic tilt control, passengers will be able to load and unload at both terminals and the two mid-stations with the compartments of the two cars completely level. With a capacity of 130 passengers per car, the new funicular has a rated transport capacity of 1,300 persons per hour in each direction.

For the second stage from Hungerburg to Seegrube and the third stage from Seegrube to the summit at Hafelekar, the challenge was to integrate a modern, high-capacity system in the existing station structures - famous buildings designed by the architect Baumann that are now subject to a conservation order. This required great sensitivity with regard to the necessary modifications. The new



Lower terminal of the funicular next to the Convention Center



New bridge across the River Inn for the funicular

Seegrube reversible will operate with state-of-the-art cars with a capacity of 95 persons each for

a maximum transport capacity of 800 persons per hour in each direction.



The routing of the Nordkettenbahn line to the Hungerburg